

central portion thereof and the molding of a ~~plus~~ lens having a thinner peripheral portion than a central portion thereof.

3 3. (Amended) The lens producing method according to Claim 1, wherein:

the gate is provided therein with a gate top member and an inner face for determining the opening configuration of the gate, so that the gate opening configuration is formed by a space between the inner face of the gate and the gate top member; and the gate opening configuration is changed by changing at least one of a width, a gate angle, and a height of the gate top member [as determinant elements of the gate opening configuration].

4. (Amended) A lens producing method for molding a desired lens molding by solidifying a thermoplastic molten resin in a molding lens cavity formed in an injection molding die for molding a lens, the lens molding being processed by washing with a cleaning fluid and coating with a coating fluid, comprising the steps of[;]:

molding the lens molding by using the injection molding die for molding the lens provided therein with [the] plural molding lens cavities in the injection molding die for molding [the lens] a plurality of lenses, a [gate] plurality of gates that function as [an] inlet [port] ports for the molten resin [flowed into the cavity to be opened toward the cavity] flowed into the cavities, each gate opening into a separate one of the cavities, and a runner connecting [between] the plural cavities through the [gate] gates and a sprue connected to the runner;

changing shapes of an opening configuration of the [gate] gates in response to the molding of a minus lens having a thicker peripheral portion than a central portion thereof and the molding of a plus lens having a thinner peripheral portion than a central portion thereof; and

changing the volume of a connection portion of the runner and the sprue to be smaller in molding the plus lens than molding the minus lens.

A2 5. (Amended) The lens producing method according to Claim 4,

wherein the lens molding is a spectacle lens having a meniscus-shape; and

wherein [an opening area of the gate] the openings of the gates for molding the minus lens [is] are larger than the [opening area of the gate] openings of the gates for molding the plus lens.

6. (Amended) The lens producing method according to Claim 4, wherein [the] each gate is provided therein with a gate top member[,] for determining the opening configuration of the gate, so that the gate opening configuration formed by a space between [the] an inner face of the gate and the gate top member and the gate opening configuration is changed by changing at least one of a width, a gate angle, and a height of the gate top member [as determinant elements of the gate opening configuration].

Sub 34/ 8 11. (Amended) An injection molding die for molding a lens in order to mold a lens molding made of a thermoplastic resin with a washing process by a cleaning fluid and a coating process by a coating fluid, comprising:

A3 [plural] a plurality of lens molding cavities for molding a plurality of lens [portion];

[a gate opened toward each] a plurality of gates, each said gate opening towards a separate one of said cavities;

10 a runner connecting said plural cavities, [through said gate] wherein said runner is connected to said cavities through said gates; and

a sprue connected to said runner,

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wherein each said gate [being] is provided therein with a gate top member for determining an opening configuration of said gate, each [of the plural] said gate top [members prepared for changing the gate opening configuration] member being exchangeably placed in said gate, in which said gate top member is located and a connection portion of said runner and said sprue being provided therein with a projection protruding toward the inside of at least one of said runner and said sprue.

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12. (Amended) The injection molding die for molding the lens according to Claim 11, 8

wherein the lens molding is a spectacle lens having a meniscus-shape; and

wherein said prepared plural gate top members each is different in at least one [of] gate opening configuration determinant elements of [a] width, [a] gate angle and [a] height from one another, the gate opening configuration determinant elements defining the shape of said gate opening configuration formed by a space between the inner face of said gate and said gate top member.

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13. 10 (Amended) The injection molding die for molding the lens according to Claim 11, 8, further comprising a gate forming member opposing to at least one said gate top member, said gate forming member either having a notch portion formed on the face opposing to said gate top member or not, and being exchangeable.

B G 4 13 16. (Amended) The lens molding according to Claim 15, 12 wherein each said pinch portion is formed by decreasing a diameter of [the] a side of said runner forming portion adjacent to said sprue forming portion.

14 17. (Amended) The lens molding according to Claim 15, 12 wherein said lens portion molded in the cavity is a meniscus lens for a spectacle lens, the lens portion having a thicker central portion than a peripheral portion thereof.

Please add the following claims:

¹⁵ 18. An injection molding die assembly for molding a lens from thermoplastic resin, said assembly including:

¹⁵ a die unit having a cavity in which the thermoplastic resin is received and in which the thermoplastic resin is molded to form the lens; and a gate through which the thermoplastic resin is flowed into the cavity, wherein said die unit has opposed first and second face surfaces that define a height of the gate;

at least one insert disposed in the cavity that defines a surface of the lens to be molded; and

¹⁰ a gate member releasably secured to said die unit against the first face surface in the gate, said gate member having a height less than the height of the gate so that the gate member and the second face surface of said die unit collectively define a gate opening through which the thermoplastic resin flows into the cavity.

¹⁶ 19. The injection molding die assembly of Claim ¹⁵18, wherein said die unit has a runner through which the thermoplastic resin is injected and the gate is located between the runner and the cavity.

¹⁷ 20. The injection molding die assembly of Claim ¹⁵18, wherein said at least one insert is releasably secured into the cavity and said at least one insert and said gate member are separate components.

¹⁸ 21. The injection molding die assembly of Claim ¹⁵18, wherein the first face surface of said die unit is located below the second face surface of said die unit.

¹⁹ 22. The injection molding die assembly of Claim ¹⁵18, wherein said gate member is releasably attached to said die unit by a threaded fastener.

²⁰ 23. The injection molding die assembly of Claim ~~18~~, ¹⁵ wherein: said die unit includes a stationary die and a movable die that is capable of movement towards and away from said stationary die; and said stationary die and said movable die, when abutting each other, collectively define the gate and the cavity.

²¹ 24. The injection molding die assembly of Claim ~~23~~, ²⁰ wherein the first face surface of said die unit is formed by a surface of said stationary die and said gate member is secured to said stationary die.

²² 25. The injection molding die assembly of Claim ~~23~~, ²⁰ wherein said movable die includes a guide member opposite said gate member that is spaced from said gate member, said guide member defining the second face surface of said die unit and being releasably secured to said movable die.

²³ 26. The injection molding die assembly of Claim ~~18~~, ¹⁵ wherein:
the die unit cavity and said at least one insert are formed so that said die unit is configured to mold a spectacle lens having a meniscus shape;

said gate member is formed to have a first face that is directed away from the cavity and a second face that is directed towards the cavity, said first and second faces subtending planes that intersect at a specific gate angle and a specific height;
and

said gate member is selected from one of a set of a plurality of gate members wherein the gate members of said set are formed to have different heights or gate angles from each other.

²⁴ 27. The injection molding die assembly of Claim ~~18~~, ¹⁵ further including a guide member that is releasably secured to said die unit and is located opposite said gate member wherein said guide